

REMARKS

Claims 1, 5 and 28 are amended. Claims 48-50 are cancelled. Claims 51-56 are added. Claims 1-47 and 51-56 are in the application for consideration.

The specification is amended to correct typographical errors noted by the Examiner. Accordingly, the Examiner's objection to the specification should be withdrawn.

Claim 1 is amended to overcome the §112, second paragraph rejection. Reference to an oxide of silicon was not intended to be presented in the application as-filed, and such is hereby removed.

The Examiner also alleges that Applicant's use of "substantially selectively" is indefinite. Applicant disagrees and requests reconsideration. Specifically, Applicant's specification as-filed at paragraph [0027] clearly and adequately defines what Applicant means by a substantially selective etch. Accordingly, the claims in such regard are definite, and the Examiner's rejection should be withdrawn. Action to that end is requested.

Independent claims 1 and 25 recite methods of etching silicon nitride substantially selectively relative to an oxide of aluminum which includes exposing the silicon nitride and aluminum oxide to an etching solution comprising HF and an organic HF solvent under conditions effective to etch the silicon nitride substantially selectively relative to the aluminum oxide. Claim 25 is narrower than claim 1 in the recitation of a densified aluminum oxide, as such term is defined in Applicant's specification. Such claims

stand rejected as being obvious over a combination of U.S. Patent No. 4,269,654 to Deckert et al. in view of Protasov et al. Applicant disagrees and requests reconsideration.

The Deckert et al. reference clearly and only refers, in pertinent part, to silicon oxide etching. There is no reference, disclosure or inference to etching a silicon nitride selectively relative to aluminum oxide. The Examiner relies on the Protasov et al. article, which refers to a group of oxides including silicon oxide and aluminum oxide. However, the properties and similarities referred to by Protasov et al. relate to optical and thermophysical characteristics in the field of intensive coherent radiation and wideband thermal powerful radiation with respect to such oxides. Accordingly, the grouping of silicon dioxide and aluminum oxide in Protasov et al. is with respect to dielectric or other characteristics of the materials as-deposited over a substrate. Reference to characteristics of certain properties of different materials would in no way suggest to a person of skill in the art that the list of materials would in any way have similar etching characteristics under any conditions, and certainly not with respect to etching various materials with Applicant's claimed etching solutions. Nothing is mentioned in Protasov et al. regarding etching characteristics of the disclosed materials.

A person of skill in the art would not expect any meaningful teachings regarding etching characteristics of different stated materials where a reference merely teaches the characteristics of a group of materials totally

unrelated to etching. Accordingly, a person of skill in the art would not be led to believe, from the combination of references, that silicon nitride and aluminum oxide, when exposed to an etching solution comprising HF and an organic HF solvent, could be utilized under conditions effective to etch the silicon nitride substantially selectively relative to aluminum oxide. Nothing in the combined references would suggest to a person of skill in the art what, if any, etching characteristics occur with respect to an oxide of aluminum when exposed to an etching solution comprising HF and an organic HF solvent.

For at least these reasons, the combination of Deckert et al. with Protasov et al. does not render obvious Applicant's independent claims 1 and 25. Accordingly, such should be allowed, and action to that end is requested.

Applicant's dependent claims should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art. For example regarding claims 5, 28 and 51-56, such inherently recite cyclic alcohols, and not one of the references cited by the Examiner in rejecting the claims discloses a cyclic alcohol. The Examiner erroneously asserts that ethylene is alicyclic with respect to the rejection of claim 5, and this is in error. Ethylene is not alicyclic.

With respect to the Examiner's rejection of dependent claims 6 and 29, Siegl et al. in no way discloses an etching solution which is exposed

to silicon nitride and an oxide of aluminum. Further, the Examiner's reference to GB 1,160,945 is understood to refer to cleaning or etching surfaces of aluminum and its alloys, not with reference to oxides of aluminum.

With respect to dependent claims 11 and 34, the Examiner merely cites to a reference that discloses the existence of carboxylic acid polyols, but is otherwise not pertinent to anything having to do with Applicant's claims 11 and 34.

This application is believed to be in immediate condition for allowance, and action to that end is requested.

Respectfully submitted,

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